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10/798,359	03/12/2004	Yoshikazu Takamatsu	Q80302	5625
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SUGHRUE-265550			EXAMINER	
2100 PENNSYLVANIA AVE. NW			HEWITT, JAMES M	
WASHINGTON, DC 20037-3213				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

Application No.

10/798,359

Applicant(s)

TAKAMATSU ET AL.

Examiner

James M. Hewitt

Art Unit

3679

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 7/6/07 & 8/14/07.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 10-15 and 26-32 is/are pending in the application.
- 4a) Of the above claim(s) 14 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 10-13, 15, 26-32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>8/14/07</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Objections***

Claims 11-13, 15, 27, 29-30 and 32 are objected to because of the following informalities:

In claim 11, line 16, "outer" should be "inner".

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 10, 26, 28 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Parker (US 5,076,242) in view of Hartnagel et al (US 6,009,908).

With respect to claim 10, Parker discloses a duplex pipe and a joint for the duplex pipe, the duplex pipe including an outer pipe (38) for passing a first fluid, an inner pipe (34) disposed inside of the outer pipe, the inner pipe for passing a second fluid, wherein the inner pipe extends beyond the outer pipe to expose a portion of the inner pipe, the joint comprising: a main body, the main body disposed at an end portion of the outer pipe to cover the exposed portion of the inner pipe, the main body forming a first passage for passing the first fluid flowing inside the outer pipe; the first passage

having a first receiving end proximal to the outer pipe and the main body defining a first opening (for 54) at a distal end of the first passage with respect to the outer pipe, the first opening for supplying the first fluid from the passage to a first conduit, the main body also forming a second passage, the second passage having a second receiving end proximal to the inner pipe and a second opening (for 48) at a distal end of the second passage with respect to the inner pipe, the second opening for supplying the second fluid from the inner pipe to a second conduit; wherein the first opening and the second opening are displaced from one another in a longitudinal direction of the duplex pipe; wherein the exposed portion of the inner pipe crosses the first passage; and wherein the outer pipe, the inner pipe and the ribs of the duplex pipe are formed as one body. Parker fails to teach a rib connecting the outer and inner pipe. Hartnagel et al teaches a similar pipe assembly wherein ribs (20) are disposed within the outer tube (18) and extend radially inwardly and longitudinally to locate or center the inner tube (12) relative to the outer tube. Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Parker to include ribs connecting his outer and inner pipes as taught by Hartnagel et al in order to locate or center the inner tube (12) relative to the outer tube.

With respect to the limitation requiring the outer pipe, the inner pipe and the ribs of the duplex pipe are formed as one body by at least one of an extruding process and a drawing process, the method of forming the device (i.e. extrusion, drawing) is not germane to the issue of patentability itself and does not serve to structurally distinguish the claims.

With respect to claim 26, wherein the exposed portion of the inner pipe is substantially straight.

With respect to claim 28, wherein the first opening and the second opening are defined in one and the same side surface of the main body independently from each other.

With respect to claim 31, wherein the main body is block-shaped.

Claims 11-13, 15, 27, 29-30 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Parker (US 5,076,242) in view of Hartnagel et al (US 6,009,908) in view of Martin (US 4,886,305) and further in view of O'Laughlin (US 1,986,010).

With respect to claim 11, Parker discloses a duplex pipe and a joint for the duplex pipe, the duplex pipe including an outer pipe (38) for passing a first fluid, an inner pipe (34) disposed inside of the outer pipe, the inner pipe for passing a second fluid, the inner pipe extends beyond the outer pipe to expose a portion of the inner pipe, the joint comprising: a main body defining a first passage for passing the first fluid and a second passage for passing the second fluid; a first connecting portion (portion of body adjacent end of outer pipe) at an end of the first passage proximal to the outer pipe and connecting an end of the outer pipe with the first passage; a second connecting portion (portion of body adjacent end of inner pipe) at an end of the second passage proximal to the inner pipe and connecting an end of the inner pipe with the second passage; a first opening (for 54) at an end of the first passage distal from the outer pipe; a second opening (for 48) at an end of the second passage distal from the outer pipe; a stopper

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(shoulder of body against which outer pipe end abuts) for engaging the end of the outer pipe or the end of the inner pipe with the first connecting portion or the second connecting portion, respectively; and wherein the first opening and the second opening are formed in a side of the main body and are displaced from one another in a longitudinal direction of the duplex pipe; wherein the outer pipe, the inner pipe and the ribs of the duplex pipe are formed as one body. Parker fails to teach a rib connecting the outer and inner pipe. Hartnagel et al teaches a similar pipe assembly wherein ribs (20) are disposed within the outer tube (18) and extend radially inwardly and longitudinally to locate or center the inner tube (12) relative to the outer tube. Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Parker to include ribs connecting his outer and inner pipes as taught by Hartnagel et al in order to locate or center the inner tube (12) relative to the outer tube. Parker fails to teach that the second connecting portion defines a concave portion. Martin teaches a similar pipe assembly having connecting portion adjacent the end portions of the inner pipes. Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Parker's second connecting portion to define a concave portion as taught by Martin as an alternative design configuration. Parker fails to teach a brazing material brazed in the concave portion of the second connecting portion, the brazing material for brazing the end of the inner pipe to the second connecting portion. O'Laughlin teaches a joint wherein a soldering or brazing ring is disposed an interior shoulder of the fitting that acts as a stop for an inserted pipe, the ring acting to secure the end of the inserted

pipe upon application of heat. In view of O'Laughlin's teaching, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a soldering/brazing ring at the stopper portion of Martin as an alternate means to reliably secure the inner pipe (34) to the fitting body.

With respect to the limitation requiring the outer pipe, the inner pipe and the ribs of the duplex pipe are formed as one body by at least one of an extruding process and a drawing process, the method of forming the device (i.e. extrusion, drawing) is not germane to the issue of patentability itself and does not serve to structurally distinguish the claims.

With respect to claim 12, wherein the concave portion has a tapered cross section. Refer to Martin.

With respect to claim 13, wherein the main body portion is positioned such that a release mouth of the concave portion is turned upward when the end of the inner pipe is brazed to the second connecting portion to temporarily support the brazing material and store the brazing material fused therein.

With respect to claim 15, wherein the main body comprises a first wall defining a blind hole in the first passage; and the first connecting portion is formed at a release end of the blind hole.

With respect to claim 27, wherein the exposed portion of the inner pipe extends through the first passage.

With respect to claim 29, wherein: the concave portion is located outside the inner pipe, and the concave portion opens toward the first passage.

With respect to claim 30, wherein the first opening and the second opening are defined in one and the same side surface of the main body independently from each other.

With respect to claim 32, wherein the main body is block-shaped.

### ***Response to Arguments***

Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.




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Any inquiry concerning this communication or earlier communications from the examiner should be directed to James M. Hewitt whose telephone number is 571-272-7084.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel Stodola can be reached on 571-272-7087. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JMH  
8/31/07

  
JAMES M. HEWITT  
PRIMARY EXAMINER